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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,308	10/22/2003	Richard D. Dettinger	ROC920030320US1	6406

46797 7590 10/19/2006

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EXAMINER

EBIRIM, EMEKA

ART UNIT PAPER NUMBER

2166

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/691,308	<b>Applicant(s)</b> DETINGER ET AL.	
	<b>Examiner</b> Emeka Ebirim	<b>Art Unit</b> 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Status***

1. This communication is responsive to the Amendments filed on June 30, 2006. The application has been fully examined and claims 1-24 and 26-30 are rejected and are pending in this Office Action.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on June 30, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on application number 10/691415 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Response to Arguments***

#### ***Double Patenting Rejection***

3. Applicants' submission of terminal disclaimer over comes the double patenting rejection as applied. As such the examiner has withdrawn the objection.

#### ***Claim Objections***

4. Applicant's amendments with respect to improper dependency of claim 22 have been fully considered and it overcomes the objections. As such the examiner has withdrawn the objection.

*Claim Rejections - 35 USC § 101*

5. Applicant's amendments with respect to claims the 101 rejections of the present application have been fully considered and it overcomes the rejections as applied under 35 USC § 101. As such the rejections have been withdrawn.

*Claim Rejections - 35 USC § 102*

6. Applicant's arguments with respect to claims 1-24 and 26-30 of the present application have been fully considered but are not persuasive. The examiner respectfully traverses applicant's arguments.

With respect to the independent claims 1, 6, 11, 17, 21 and 28, Applicants argue that Wical does not disclose, "modifying a query".

In response to this argument, the Examiner respectfully submits that Wical discloses the claimed limitation as "The query terms are then expanded through use of the knowledge base" [Fig 7, Col 17 lines 62-65, Col 18 lines 1-16]. The initial query terms entered by the user are further modified to include other relevant terms that would enable a more effective search of the system. The expansion of the query terms certainly equates to the modification of the query as claimed by the applicant.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

*Interpretation of Claims-Broadest Reasonable Interpretation*

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the

examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Reference is made to MPEP 2144.01 - Implicit Disclosure

"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)

For the above reasons, Examiner believed that rejection of the last Office action was proper. And as such rejections as applied to the last Office action are hereby sustained.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-24 and 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Patent No: 5,940,821 to Wical (hereinafter Wical).

**Claim 1.**

Wical discloses:

A method for context-sensitive searching of fields of a data repository using multiple levels of term expansion, comprising [context, search, repository, levels, expansion, term, Wical Col 3 lines 28-35, Col 4 lines 48-63, Col 14 lines 25-30, Fig 6,7]:

receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term [receive, user query, Wical Col 7 lines 62-67, Col 8 lines 40-45];

obtaining one or more parameters associated with the base search term [Col 13 lines 50-57];

obtaining a level of expansion based on the one or more parameters associated with the base search term [level, expand, Col 14 lines 15-45] ;

obtaining, based at least in part on the level of expansion, one or more expanded search terms [Col 14 lines 15-45]; and

prior to executing the query modifying the query to contain one or more conditions based on the one or more expanded search terms [Wical Col 3 lines 11-22, Col 17 lines 62-65].

Claim 2.

Wical discloses the elements of claim 1 as above and furthermore it discloses wherein the one or more parameters associated with the base search term comprise a name of the at least one field [Category name, Wical Col 12 lines 1-15, Fig 8A,B,C].

Claim 3.

Wical discloses the elements of claim 1 as above and furthermore it discloses wherein the one or more parameters associated with the base search term comprise a name of a table containing the at least one field [table, Wical Col 30 lines 4-10].

Claim 4.

Wical discloses the elements of claim 1 as above and furthermore it discloses wherein different one or more expanded search terms are obtained for the at least one base search term depending on the name of the at least one field [Category name, Wical Col 12 lines 1-15, Fig 8A,B,C] .

Claim 5.

Wical discloses the elements of claim 1 as above and furthermore it discloses wherein the one or more parameters associated with the base search term comprise a user-specified level of expansion [Wical Col 15 lines 1-6].

Claim 6.

Wical discloses:

A method for searching fields of a data repository using multiple levels of term expansion, comprising [context, search, repository, levels, expansion, term, Wical Col 3 lines 28-35, Col 4 lines 48-63, Col 14 lines 25-30, Fig 6,7]:

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receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term [receive, user query, Wical Col 7 lines 62-67, Col 8 lines 40-45];

obtaining a level of expansion associated with the base search term [Col 13 lines 50-57];

obtaining, based on the base search term and the associated level of expansion, one or more expanded search terms [Col 14 lines 15-45]; and

prior to executing the query modifying the query to contain one or more conditions including the one or more expanded search terms [Wical Col 3 lines 11-22, Col 17 lines 62-65].

#### Claim 7.

Wical discloses the elements of claim 6 as above and furthermore it discloses wherein the base search term corresponds to an instance data value of the at least one field [value, Wical Col 18 lines 35-40, Fig 9B].

#### Claim 8.

Wical discloses the elements of claim 6 as above and furthermore it discloses providing an interface allowing a user to specify the level of expansion associated with the base search term [user interface, Wical Col 32 lines 38-43, Col 15 lines 1-6, Fig 6].

#### Claim 9.



Wical discloses the elements of claim 6 as above and furthermore it discloses wherein obtaining one or more expanded search terms comprises selecting a set of expanded search terms from a plurality of sets of expanded search terms, each set corresponding to a different level of expansion [Wical, Fig 6,7, 9C, Col 14 lines 27-55].

Claim 10.

Wical discloses the elements of claim 6 as above and furthermore it discloses wherein the number of expanded search terms in each set is dependent on the corresponding level of expansion [Wical, Fig 6,7, 9C, Col 14 lines 27-55]..

Claim 11.

Wical discloses:

A method for context-sensitive searching of fields of a data repository, comprising [context, search, repository, levels, expansion, term, Wical Col 3 lines 28-35, Col 4 lines 48-63, Col 14 lines 25-30, Fig 6,7]:

receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term [receive, user query, Wical Col 7 lines 62-67, Col 8 lines 40-45];

obtaining, based one or more parameters associated with the base search term, one or more expanded search terms [Wical Col 14 lines 27-55, Fig 6,7,8A-C; and

prior to executing the query modifying the query to contain one or more conditions based on the one or more expanded search terms [Wical Col 3 lines 11-22,

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Col 17 lines 62-65].

Claim 12.

Wical discloses the elements of claim 11 as above and furthermore it discloses wherein the one or more parameters associated with the base search term comprise a name of the at least one field [Category name, Wical Col 12 lines 1-15, Fig 8A,B,C].

Claim 13.

Wical discloses the elements of claim 12 as above and furthermore it discloses wherein different one or more expanded search terms are obtained for the at least one base search term depending on the name of the at least one field [Category name, Wical Col 12 lines 1-15, Fig 8A,B,C].

Claim 14.

Wical discloses the elements of claim 11 as above and furthermore it discloses wherein the one or more parameters associated with the base search term comprise a name of a table containing the at least one field [table, Wical Col 30 lines 4-10].

Claim 15.

Wical discloses the elements of claim 11 as above and furthermore it discloses wherein the one or more parameters associated with the base search term comprise a level of expansion [Wical Col 14 lines 27-55].

Claim 16.

Wical discloses the elements of claim 15 as above and furthermore it discloses wherein the level of expansion is dependent on one or more other ones of the one or more parameters [Wical Col 14 lines 27-55].

Claim 17.

Wical discloses:

A computer-readable storage medium containing a program for searching fields of a data repository using multiple levels of term expansion which, when executed, performs operations comprising [computer readable medium, context, search, repository, levels, expansion, term, Wical Col 32 lines 57-65, Col 3 lines 28-35, Col 4 lines 48-63, Col 14 lines 25-30, Fig 6,7]:

providing a first interface allowing a user to build a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term [Wical Fig 14, Col 14 lines 38-55];

providing a second interface allowing the user to specify expanded search terms to be associated with the at least one base search term [Wical Fig 14, Col 14 lines 38-55]; and

prior to executing the query, modifying the query to contain one or more conditions including the one or more specified expanded search terms [Wical Col 3 lines 11-22, Col 17 lines 62-65].

Claim 18.

Wical discloses the elements of claim 17 as above and furthermore it discloses the second interface is accessible from the first interface [Wical Fig 14, Col 14 lines 38-55].

Claim 19.

Wical discloses the elements of claim 17 as above and furthermore it discloses wherein the second interface allows a user to specify different sets of expanded search terms associated with different levels of expansion [Wical Fig 14, Col 14 lines 38-55].

Claim 20.

Wical discloses the elements of claim 19 as above and furthermore it discloses wherein the different levels of expansion are determined, at least in part, based on one or more credentials of the user [Wical Col 13, lines 50-58].

Claim 21.

Wical disclose:

A data processing system, comprising [Wical Col 4 lines 23-30]:

a collection of data [Wical Col 2 lines 45-55];

at least one expanded term repository [Wical, Col 2 lines 45-55, Col 26 lines 60-65, Fig 2, 12]; and

an executable component configured to receive a query containing at least one condition for searching the collection of data, obtain, based on at least one base search term included in the at least one condition and at least one parameter indicative of a context of the query, one or more expanded search terms contained in the at least one expanded term repository, and prior to executing the query modify the query to contain one or more conditions based on the one or more expanded search terms [Wical, Col 2 lines 45-55, Col 26 lines 60-65, Fig 2&12, Col 14 lines 27-55, Col 17 lines 62-65].

Claim 22.

Wical discloses the elements of claim 21 as above and furthermore it discloses wherein the collection of data is a relational database [relational database, Wical Col 6 lines 65-67].

Claim 23.

Wical discloses the elements of claim 21 as above and furthermore it discloses wherein the collection of data is a text document [Wical Col 5 lines 55-60].

Claim 24.

Wical discloses the elements of claim 21 as above and furthermore it discloses wherein the at least one expanded term repository comprises a single repository containing different sets of expanded search terms associated with the same base term [Wical, Col 14 lines 25-37, Fig 8A-C].

Claim 25.

(cancelled)

Claim 26.

Wical discloses the elements of claim 21 as above and furthermore it discloses wherein the at least one parameter indicative of a context of the query is indicative of a portion of the collection of data involved in the at least one condition [Wical Col 14 lines 20-30].

Claim 27.

Wical discloses the elements of claim 26 as above and furthermore it discloses wherein the at least one parameter indicative of a context of the query comprises a name of a table containing the at least one field [table, Wical Col 30 lines 4-10].

Claim 28.

Wical discloses:

A method of searching fields of a data repository using dynamic term expansion, comprising [Wical Col 30 lines 48-55, 60-65]:

obtaining a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term [receive, user query, Wical Col 7 lines 62-67, Col 8 lines 40-45];

identifying a set of expanded terms associated with the base search term;  
generating a pointer to the identified set of expanded search terms [Links (pointer) Wical, Fig 6,7, 9C, Col 14 lines 27-55, Col 11 lines 42-44]; and

prior to executing the query, modifying the query to contain one or more conditions based on one or more expanded search terms retrieved using the pointer [links (pointer), Wical Col 3 lines 11-22, Col 11 lines 42-44, Col 17 lines 62-65].

Claim 29.

Wical discloses the elements of claim 28 as above and furthermore it discloses modifying the identified set of expanded search terms after generating the pointer [Links (pointer), Wical Col 11 lines 42-44].

Claim 30.

Wical discloses the elements of claim 28 as above and furthermore it discloses wherein the pointer comprises a directory path to a database [directory guide, Wical Col 2 lines 28-30].

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emeka Ebirim whose telephone number is 571-272-3994. The examiner can normally be reached on 8:30pm - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBP

Name: Emeka Ebirim  
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